

Food Engineering

Emphasis Electives- Need 3 courses

| Course | | Cr | Semester | Pre-reqs | Others | LibEd |
|-----------|---|----|----------|----------------------------------|--------|-------|
| BBE 4401 | Bioproducts Separation and Purification Processes | 3 | Fall | | | |
| BBE 4404 | Biopolymers & Biocomposites Eng. | 3 | Fall | upper division, or instr consent | | |
| BBE 4533 | Sustainable Waste Managem. Eng | 3 | Spring | BBE 3023, and upper div CSE | | |
| BBE 4753 | Air Quality and Pollution Control E. | 3 | Spring | BBE 3012, 3043, UD | | |
| BBE 4733 | Renewable Energy Technologies | 3 | Spring | Junior or senior | | TS |
| CEGE 4502 | Water and Wastewater Treatment | 3 | F,S | CEGE 3501, or CHEN 2001 | | |
| IE 5513 | Engineering Safety | 4 | F,S | Upper div CSE, or grad student | | |
| IE 5541 | Project Management | 4 | F,S | Upper div CSE, or grad student | | |

Technical Electives- Need 9 credits

| Course | | Cr | Semester | Pre-reqs | Others | Lib Ed |
|-----------|---|----|----------|--|----------------|--------|
| BBE 3396 | Industry Assignment | 1 | F,S | | | |
| BBE 4001 | Chemistry of Biomass and Biomass Conversion | 4 | Fall | CHEM 2301, or instr consent | | ENV |
| BBE 4301 | Applied Surface and Colloid Science | 3 | Fall | BBE 3043, or BMEN 2101, or CHEN 3101, or CHEM 4501, | | |
| BBE 4401 | Bioproducts Separation and Purification Processes | 3 | Fall | BBE3012, 3033, 3043, and Concurrent 4013 | * | |
| BBE 4404 | Biopolymers & Biocomposites Eng. | 3 | Fall | BBE/CSE upper division, or instr consent | * | |
| BBE 4533 | Sustainable Waste Managem. Eng | 3 | S | BBE 3023, and upper div CSE | * | |
| BBE 4733 | Renewable Energy Technologies | 3 | Spring | Junior or senior | * | TS |
| BBE 4900 | Intern Reports | 2 | F, S, Su | student in BBE | Repeat allowed | |
| CHEM 2302 | Organic Chemistry II | 3 | F, S, Su | CHEM 2301 | | |
| CHEM 2311 | Organic Lab | 4 | F, S, Su | CHEM 2302 or CHEM 2304, or concurrent registration in CHEM 2302 or CHEM 2304 | | |
| CEGE 4502 | Water and Wastewater Treatment | 3 | F, S | CEGE 3501 or CHEN 2001 | | |
| FSCN 1102 | Food: Safety, Risks, & Technology | 3 | F, S | | | CIV |
| FSCN 1112 | Principles of Nutrition | 3 | F, S, Su | High school biology&chemistry | | |
| FSCN 3102 | Introduction to Food Science | 3 | Fall | CHEM 1022, or [CHEM 1062 and CHEM 1066] | | |
| FSCN 4112 | Food Chemistry and Functional Foods | 3 | Fall | FSCN 3102 and BIOC 3021 | | |
| FSCN 4121 | Food Microbiology | 3 | Spring | BIOC 3021, and [FSCN 2021 or VBS 2032 or MICB 3301] | | |
| FSCN 4332 | Food Processing Operations | 3 | Spring | | | |
| IE 5513 | Engineering Safety | 4 | F,S | Upper div CSE | | |
| IE 5441 | Project Management | 4 | F, S | Upper div CSE | | |

* if not already taken as Emphasis electives.